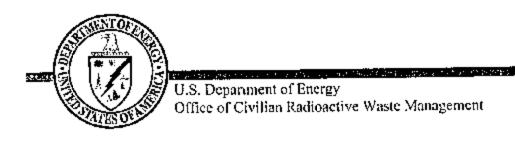ENCLOSURE 4

Management Improvement Initiatives

Presented to:
DOE/NRC Quarterly Quality Assurance Meeting

Presented by:
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Office of Civilian Radioactive Waste Management

Outline

- History and Background

- Lessons Learned

- Five Key Areas for Improvement

- How Are We Going to Manage?

- Effectiveness Indicators

- Conclusions

History and Background

- 1998: Senior managers began transition from work technically sufficient for site suitability to traceability needed for licensing

- 2001: Quality Assurance (QA) organization identified recurring conditions adverse to quality (BSC 01-C-001 and -002)

  - Root cause analysis identified weaknesses in management systems, quality processes, and roles and responsibilities

  - Management recognized need for sustained initiative to:

    - Clarify roles, responsibilities, authority, and accountability

    - Improve effectiveness of QA program implementation

    - Drive culture to consistency with NRC-regulated environment

History and Background
(Continued)

- **2002: OCRWM Management Improvement Initiatives (OMII) submitted to NRC**

  - Document did not meet previous commitments or expectations

  - OCRWM committed to submit a revised document that reflects:

    - Actions to address deficiencies and recommendations

    - Remedial and corrective actions for corrective action reports

    - Other relevant actions to improve OCRWM management practices

- **Revised document completed in July 2002**

Source Documents

- **15 documents were reviewed, including:**

  - Corrective Action Reports (CARs) [2]

  - Root Cause Analyses [2]

  - Concerns Program Trend Report [1]

  - NRC-DOE Correspondence [3]

  - DOE/BSC Internal Evaluation and Correspondence [4]

  - Quality Assurance Management Assessments [2]

  - External Evaluation Report (Morgan, Lewis & Bockius) [1]

- **Management Improvement Initiatives Appendix A references source documents and correlates with action summaries**

Lessons Learned

- **Lessons Learned Evaluation Team reviewed OMII submittal process**

  - Reference: OCRWM-LL-2002-066 (Completed July 2002)

- **Team found Yucca Mountain Project management system needs improvements in:**

  - Program standards, policies, administrative controls and direction to employees

  - Oversight, employee relations, and employee feedback

  - Accountability

- **Findings common to both DOE (line and QA) and BSC; impact all levels of organizations**

Lessons Learned

(Continued)

- **Recommended corrective actions are:**

  - Conduct management meetings to communicate lessons learned and future expectations

  - Issue letters to clearly define performance expectations, responsibilities, and authorities

  - Redirect or establish Deputy Manager for conflict identification and resolution, issue escalation, and independent assessment of CAR/Deficiency Reports (DRs)

  - Establish senior review board for independent review of significant issues and plans

- **Actions address Program's weaknesses and envelope lower-level deficiencies and recommended actions from source documents**

Five Key Areas for Improvement

- Project Roles, Responsibilities, Authority, and Accountability (R2A2)

- Quality Assurance Programs and Processes

- Project Procedures

- Corrective Action Program

- Safety-Conscious Work Environment

Roles, Responsibilities, Authority, and Accountability (R2A2)

- Objective: Define ownership and accountability

- Current: Support site suitability; R2A2 confusion

- Desired: Align for licensing; understand and accept

- Approach: Realignment, clarification, and definition

  - Issue DOE policy statement identifying expectations

  - Clarify R2A2 to align authority and responsibility

  - Orient DOE staff to hold BSC accountable

  - Orient BSC staff to organization and R2A2

  - Issue DOE Program Manual on implementing requirements

  - Revise DOE annual performance appraisals

Quality Assurance Programs and Processes

- Objective: Implement QA requirements and processes

- Current: Quality processes need improvement; requirements documentation confusing and difficult

- Desired: Define and clarify roles and responsibilities

- Approach: Focus on quality at working level

  - Issue DOE policy statement on expectations

  - Clarify R2A2 for Office of Quality Assurance (OQA)

  - Orient DOE and BSC staffs on R2A2

  - Review Quality Assurance Requirements and Description

  - Reflect QA requirements in implementing procedures

  - Revise DOE annual performance appraisals

Project Procedures

- **Objective: Institute effective and efficient procedures**

- **Current: Overly prescriptive and inefficient**

- **Desired: Effective and efficient DOE and BSC procedures**

- **Approach: Realign R2A2; review and revise procedures**

  - **Clarify OCRWM R2A2**

  - **Review existing procedures**

  - **Issue new or revised procedures**

  - **Train personnel prior to implementation**

Corrective Action Program

- Objective: Single corrective action program

- Current: Multiple management systems

- Desired: Single, Project-wide system

- Approach: Simplify and communicate program

  - Assign OQA Director responsibility for administration and hold accountable
  - Establish DOE task team for requirements and specifications
  - Develop and implement BSC system identify and minimize adverse repetitive conditions
  - Implement single OCRWM corrective action program
  - Define and implement self-assessment and lessons-learned programs based on corrective action program

Safety-Conscious Work Environment

- Objective: Foster and sustain Safety Conscious Work Environment (SCWE)

- Current: Lack of SCWE understanding, common values, and timely actions

- Desired: SCWE embraced; work environment encourages input without fear of harassment, intimidation, retaliation, or discrimination (HIRD); prompt and meaningful response to concerns

Safety-Conscious Work Environment
(Continued)

- **Approach: SCWE Policy with clear expectations, training, reinforcement, and communication**

  - Modify BSC and other DOE contracts for SCWE

  - Eliminate backlog of open OCRWM employee concerns

  - Establish DOE and BSC policies and procedures

  - Develop/Revise SCWE training modules

  - Establish internal BSC mechanisms for employee concerns

  - Conduct employee and supervisor/manager training

  - Have external SCWE expert group evaluate YMP

Appendix B

● **Contains action summaries for CARs BSC-01-C-001 and -002 for modeling and software**

- BSC is responsible for these corrective actions

- Corrective actions listed as complete have been verified

- Effectiveness will be verified during routine Office of Quality Assurance audits and surveillances

How Are We Going to Manage?

- Establish vision, policies, and procedures yielding continuous improvement

- Establish rigor, discipline, safety-consciousness, formality, and accountability

- Create team of competent change agents dedicated to continuous improvement

- Assure success by measuring performance and providing resources to implement improvements

How Are We Going to Manage?

(Continued)

- **Effectiveness Review and Closure Process**

  - Responsible manager reviews and approves each action
  - OCRWM OQA reviews and agrees action is complete
  - Outside experts review overall effectiveness

- **Effectiveness Indicators**

  - Establish goals to manage and hold accountable
  - Goals establish desired end state
  - Interim goals measure progress toward end-state goals

Conclusions

- Senior management has reviewed and taken stock of changes needed to improve management systems and prevent further recurrence of adverse conditions

- Revised Management Improvement Initiatives sets forth plans for effective implementation of changes

- Key elements of revised approach include:

  - Recognition that managers' behaviors and accountability need to change

  - Identification of 5 key areas where improvements are needed

  - Personal commitment of Dr. Chu, OCRWM Director, to make resources available, review progress, and report to NRC